

## REMARKS

Claims 49-67 are pending in the application. Claims 49-51 have been revised to delete the reference to a handle since it was not necessary, to recite the mounting member (replaced with the term “housing”) having an upstanding wall (support — specification at para [0021] and Figure 2), and to recite that the abrading element moved in a direction other than the direction of movement of the shaft (support — specification, at para [0013], [0020], etc.). New claims 117-144 have been added and also are fully supported by the specification and figures as noted above, and further by the original claims. New independent claim 130 recites an apparatus whereby the abrading element creates a concaval-convex contour in one of the adjacent vertebral bodies, as described in paragraph [0020] of the specification. No new matter is presented by the amendments. Accordingly, applicants respectfully request entry thereof, and reconsideration of claims 49-51, and 117-144 in light of the following remarks.

Page 2 objects to the drawings as blurry and illegible. Applicants submitted a new set of drawings in the parent application, U.S. Serial No. 08/944,234, (“the parent application”) and are submitting the same set of drawings herein. Applicants respectfully request that the Examiner reconsider and withdraw this objection.

Pages 2-6 of the Action reject claims 49-67 under 35 U.S.C. §102(e) as anticipated by Michelson, U.S. Patent No. 6,440,139 (“Michelson”). Applicants respectfully traverse this rejection.

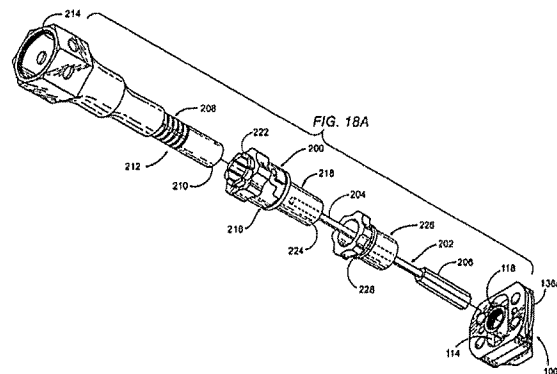
Claims 49-51, and new claims 117-129 all recite an apparatus comprising, *inter alia*, an abrading element mounted on a housing, whereby the abrading element moves in a direction other than the direction of movement of the shaft. The Action correctly points to Michelson’s disclosure at column 16, lines 12-16 as disclosing either an oscillating or vibrating motion produced by Michelson’s drive mechanism. In Michelson, the abrading element, for example as depicted in Fig. 18A as shown below, moves in the same direction as the shaft because the abrading element is connected directly to the shaft with no mechanism that would facilitate movement of the abrading element in a direction other than the direction in which the shaft is moving. For example, if the drive mechanism in the depiction of Fig. 18A of Michelson were causing the shaft to rotate about its longitudinal axis, the abrading element would similarly rotate

about that same longitudinal axis. Similarly, if the drive mechanism depicted in Fig. 18A in Michelson were causing the shaft to vibrate back-and-forth along its longitudinal axis, the abrading element would vibrate back-and-forth along that longitudinal axis.

In direct contrast to Michelson's disclosure, the present claims recite an abrading element that moves in a direction other than the direction of movement of the shaft. That is, if the shaft were rotating about its longitudinal axis, the abrading element would not be rotating about the longitudinal axis of that shaft. Rather, the abrading element recited in the present claims could be rotating about an axis other than the longitudinal axis of the shaft (e.g., in one embodiment, at or about 90° from the longitudinal axis). Michelson fails to disclose this feature of the present claims, and consequently, does not anticipate claims 49-51, and 117-129.

Michelson also fails to disclose a housing having an upstanding wall, as recited in all of the pending claims 49-51, and 117-144. The housing recited in the present claims is depicted in Figure 2 as element 31, with upstanding wall 35. The Action alleges that Michelson discloses a housing (previously recited as a mounting member) at column 15, lines 13-17. This disclosure of Michelson is reproduced below, and is in reference to Figures 16-18B:

The shaft 204 is configured to fit within a driver coupling member 208 for coupling the milling bit 202 to a driving device, well known in the art, such as motorized drill or gas driven turbine (not shown).



Michelson, at col. 15, lines 13-17.

This disclosure fails to mention a housing, and the only possible housing to which an abrading element could be mounted would be the shaft 204, which is not a housing, as that term is used in the present claims. Element 226 is an adaptor fitting that has a threaded portion 228 for engaging the threaded port 118 of the milling guide 116. The abrading element (described, for example, as milling bit 202) is not mounted on adaptor fitting 226, and consequently, Michelson fails to disclose a housing having an

upstanding wall onto which an abrading element is mounted, as recited in all of the pending claims. Michelson therefore does not anticipate the claims.

New claims 130-144 also are patentably distinct from Michelson's disclosure because the abrading element has at least one convex abrading surface selected to create a concaval-convex contour in one of the adjacent vertebral bodies. The milling bit in Michelson's disclosure merely drills a hole in the bone, and the abrading surface does not have a convex abrading surface that creates a concaval-convex contour. Michelson therefore cannot anticipate new claims 130-144.

At least two elements recited in all of the claims now pending in this application are neither disclosed, nor suggested, by Michelson's disclosure. It is well settled that a reference must disclose each and every element of the claim to anticipate that claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Michelson does not anticipate pending claims 49-51, and 117-144. Applicants therefore respectfully request that the Examiner reconsider and withdraw this rejection.

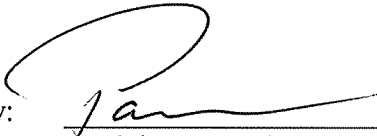
Although not required by MPEP §609.02(A)(2), applicants are submitting herewith an Information Disclosure Statement (IDS), to bring to the Examiner's attention all of the prior art cited in the parent application.

In view of the foregoing, applicants respectfully submit that the present claims are in condition for allowance. An early notice to this effect is earnestly solicited. Should there be any questions concerning the foregoing, or should the Examiner believe that a telephonic interview would serve to further advance prosecution of the claims, the Examiner is courteously invited to contact the undersigned at the telephone number listed below.

No additional fee is believed to be required for entry and consideration of this response. Nevertheless, in the event that the U.S. Patent and Trademark Office requires any additional fee to enter this response or to maintain the instant application pending, please charge such fee to the undersigned's Deposit Account No. 07-1700.

Respectfully submitted,

Dated: 9/10/07

By:   
Patrick A. Doody  
Registration No. 35,022

Tel No. (202) 346-4128  
Fax No. (202) 346-4444

Goodwin Procter LLP  
901 New York Avenue, NW  
Washington, DC 20001  
Goodwin Customer No. 000070813